### TVA

## Fact Sheet Energy Efficiency Achievements

The Tennessee Valley Authority has recognized Energy Efficiency and Demand Response (EEDR) resources as an important part of a balanced energy strategy since the late 1970s. In 2010, the TVA Board of Directors adopted a renewed vision to be one of the nation's leading providers of low-cost and cleaner energy by 2020. Recognizing energy efficiency and demand response savings can be delivered for half the cost of building and operating traditional power supply options, this renewed vision includes leading the Southeast in increased energy efficiency.

#### Background

Energy efficiency produces zero emissions, meets demand immediately and helps lower power bills for Tennessee Valley consumers. With a typical delivery cost of 2-4 cents per kilowatt-hour, energy efficiency is among the cleanest and lowest cost, long-term expansion options available to help TVA meet its vision.

TVA's energy efficiency path is supported by its energy roadmap to 2030 – the Integrated Resource Plan (IRP). Adopted in 2011, the IRP forecasts that even with the addition of at least two new nuclear units, energy efficiency and demand response contributions of 3,600 to 5,100 megawatts are needed. This amounts to about 11,400-14,400 gigawatt-hours of energy by 2020.

Beginning in late 2010, TVA began working to meet this goal by aggressively increasing participation in its EnergyRight Solutions' suite of energy efficiency programs. TVA assessed and refined its portfolio of programs, explored and implemented new and innovative programs and opened new lines of dialogue with distributors, directly served customers and the energy efficiency stakeholder community from within the Tennessee Valley and beyond.

In light of this increased emphasis on energy efficiency, in late 2010 TVA began the process of selecting a contractor to conduct a large-scale energy efficiency potential study of the Tennessee Valley. TVA selected Global Energy Partners, an internationally recognized expert in the field, to conduct the potential study.

The goal of the study is to gain an objective view of the TVA service area's energy efficiency and demand response potential in order to achieve an optimal mix of newly designed and fully implemented energy efficiency programs

#### Key points

- TVA's sharpened focus on energy efficiency has yielded strong, year-over-year reductions in energy use across the Tennessee Valley.
- In the two years from 2010 to 2011, TVA's energy efficiency programs reduced electricity consumption in the Tennessee Valley by 765 gigawatt hours – enough electricity to keep a single 100-watt light bulb burning continuously for over 1,1 00 years.
  - And in 2011 alone, TVA achieved a 559 gigawatt hour reduction in a single year an increase of 270 percent over 2010 that equals enough energy to power 50,000 households for an entire year.

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- During the first quarter of TVA's 2012 fiscal year, TVA and local power distributors achieved a 69 gigawatt-hour reduction in energy use.
- TVA's In-Home Energy Evaluations logged more than 4,800 home evaluations in the first three months of fiscal year 2012, bringing the total number of evaluations to more than 33,000 since the program began in 2009.
- In January 2012, TVA and Clayton Homes, the region's market share leader in manufactured home production, announced a new TVA program that encourages production of energy efficient, Energy Star-certified manufactured homes in the TVA region.
  - Energy Star manufactured homes allow families to save \$70 per month on average off of monthly power bills.
  - During the past decade, a total of less than 150 Energy Star-labeled manufactured homes were sold in the TVA service area.
  - As a result of TVA's new incentive, which is paid directly to manufacturers and available to all manufacturers, Clayton projects it will build up to 2,200 Energy Star homes in 2012 alone.
- To help make energy efficiency more accessible to consumers in the Tennessee Valley, TVA redesigned its EnergyRight Solutions website in 2011 to make it easier to read and navigate for residential, commercial and industrial users.
- TVA's recent efforts to improve energy efficiency also attracted attention in 2011 from the American Council for and Energy Efficiency Economy. In its 2011 state energy efficiency scorecard, both Tennessee and Alabama improved their rankings by several spots – due largely to TVA and local power distributor efforts.